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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/634,122	04/19/96	KATO	SONY-C4021

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26N2/0630

EXAMINER

RAO, A

ART UNIT

PAPER NUMBER

2615

22

DATE MAILED:

06/30/97

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/634,122

Applicant(s)

Kato

Examiner

A. Rao

Group Art Unit

2615



☒ Responsive to communication(s) filed on Mar 18, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-3, 5-10, and 12-14 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-3, 5-10, and 12-14 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 20

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Part III DETAILED ACTION

Response to Request for Reconsideration

1. Applicant's arguments with respect to claims 1-3, 5-10, and 12-14 as filed in Paper 21 on 3/18/97 have been considered but are deemed to be moot in view of the new grounds of rejection, necessitated by the removal of Kato as prior art as discussed by the Applicant in Paper 21.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. Claims 1-3, 5, 8-10, and 12-14 are rejected under 35 U.S.C. § 103 as being unpatentable over Morrison in view of Raychaudhuri et al.

Morrison discloses a picture encoding/decoding apparatus and method for forming an encoded P picture signal (Morrison: figures 2 and 3), comprising: memory means for storing a first control data included in header data of an interframe picture to control an interframe picture encoding condition (Morrison: column 6, lines 1-10; column 6, lines 20-50); comparator means for comparing the first control data with a second control data included in the next header data of another picture (Morrison: column 5, lines 10-25); and means for changing the interframe picture encoding condition and for encoding an input signal to a interframe picture according to the result from said comparator, when the first and second control data differ (Morrison: column 7, lines 28-47) as in claims 1, 3, 8, 10 and 13. In particular, Morrison is concerned with restricting the production of the overhead (header data) associated with the compressed video data, and discloses that the adaptive generation of the Morrison header data is dependent upon the characteristics of the video data, but anticipates the generation of an overhead data for a single picture for indicating changed coding factors (Morrison: column 4, lines 35-68). However, Morrison clearly fails to disclose specific use of P pictures within an MPEG, environment, although compression according to MPEG would reasonably inferred therein because the primary reference discloses adaptive or multi-modal motion compensation (Morrison: column 3, lines 3-36), and a video bitstream syntax substantially in accordance with the MPEG

layered protocol (Morrison: column 4, lines 50-65). The layered MPEG header protocol for use with a picture encoding/decoding apparatus is shown in more detail and execution by the Secondary reference of Raychaudhuri (Raychaudhuri: column 9, lines 51-68; column 10, lines 1-14). Given both references, it would be obvious to one of ordinary skill in the art to implement conditional header generation and header transmission executed by the Morrison system according to the layered MPEG protocol as delineated by Raychaudhuri, in order to adapt the Morrison apparatus for image processing according to the prevalent MPEG TV compression standard. The Morrison apparatus and method modified by the inclusion of the layered headers in accordance with MPEG as shown by Raychaudhuri, has all of the features of claims 1, 3, 8, 10, and 13.

Regarding claims 2, 5, 9, 12, and 14, the Morrison apparatus and method modified by the inclusion of the layered headers in accordance with MPEG as shown by Raychaudhuri, discloses that the layered header data is a GOP layer (Raychaudhuri: column 5, lines 1-40) as in the claims.

4. Claims 6-7 are rejected under 35 U.S.C. § 103 as being unpatentable over Morrison in view of Raychaudhuri as applied above, and further in view of Fujinami.

The Morrison apparatus and method modified by the inclusion of the layered headers in accordance with MPEG as shown by Raychaudhuri, fails to disclose an encoding method and apparatus

using the conditional transmission of layered header data in conjunction with a recording medium as expressed in claims 6-7. Fujinami discloses the use of a recording medium in an encoding/decoding apparatus and method for transmission of header control information (Fujinami: column 6, lines 32-49). It would have been further obvious to one of ordinary skill in the art to incorporate a recording storage means medium into the Morrison-Raychaudhuri apparatus as a well-known transmission media for use with a companion decoder (Fujinami: column 6, lines 40-49). The Morrison-Raychaudhuri apparatus, further including the Fujinami use of compression storage on a recording media, has all of the features of claims 6-7.


Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shimoda discloses a highly efficient encoding/decoding system. Igarashi discloses an efficient coding apparatus. Veltman discloses synchronization of A/V information.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Rao whose telephone number is (703) 305-4813.

AK
asr
June 12, 1997


TOMMY P. CHIN
SUPERVISORY PATENT EXAMINER
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